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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,516	06/07/2001	Doron Shaked	10016656-1	1676

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06/05/2003

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EXAMINER

LABAZE, EDWYN

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,516

Applicant(s)

SHAKED ET AL.

Examiner

EDWYN LABAZE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of IDS filed on 1/17/2003.
2. Receipt is acknowledged of amendments filed on 3/24/2003.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant stated the limitation “one or more predefined rules relating to disfavored” (See page 19, lines 1-3). There is no explanation or references to what these rules are related and definition of any of these rules. The examiner believes that the aforementioned limitation renders the claim vague, indefinite and unsearchable.

The lack of an art rejection with this Office action is not an indication of allowable subject matter (i.e., even though claim 11 is rewritten or amended to overcome the rejection under 35 U.S.C. 112 as discussed above). The disclosure/claimed language is such that it is impractical to conduct a reasonable search of the prior art by the examiner.

Allowable Subject Matter

5. The indicated allowability of claims 1-20 is withdrawn in view of the newly discovered reference(s) to Nojiri, Tadao et al. (EP 0 672 994) and Hara et al. (U.S. 5,726,435). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 7-9 are rejected under 35 U.S.C. 102(b) as being unpatented by Hara et al. (U.S. 5,726,435).

Re claim 1: Hara et al. discloses a method and apparatus for reading an optically two-dimensional code, which includes applying an invertible graphical operation between regions of a base and information-encoding graphical templates selected from a predefined template set to produce a graphical bar code with regions from which graphical templates are recoverable an inverse graphical operation between graphical bar code and corresponding base image regions (col.3, lines 45 +).

Re claim 2: Hara et al. teaches an apparatus and method, wherein the invertible graphical operation corresponds to an exclusive OR (XOR) operation (col.4, lines 50+).

Re claim 3: Hara et al. discloses an apparatus and method, further comprising applying XOR operations between the graphical bar code regions and corresponding base image to produce the graphical templates (col.4, lines 23-54; col.18, lines 60+).

Re claim 7: Hara et al. discloses an apparatus and method, wherein each graphical template comprises a pattern of bright/light/white and dark/black pixels (col.6, lines 33+).

Re claim 8: Hara et al. teaches a method wherein the number of bright/white pixels is greater than the dark/black pixels (col.8, lines 1+).

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Re claim 9: Hara et al. discloses a method and apparatus, wherein each pixel location within the predefined template set has an equal probability of being a black/dark pixel (col.14, lines 1+).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadao et al (EP 0672 994) in view of Chang, Kenneth (WO 00/11599).

The teachings of Tadao et al. have been discussed above, further discloses 3x3 square cells (page 9, lines 30+), a rectangular array (page 5, lines 37+) and that the pixel corresponds to each cell (page 12, lines 1+).

Tadao et al. fails to disclose an apparatus and method, wherein each of the base image and the templates has the same number of pixels and a common layout.

Kenneth Chang teaches encoding and decoding a message within an image, wherein the pixel 110 form the cells 112 (page 6, lines 8+) and cell dimension (page 16, line 4).

In view of the Chang's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to indicate into the teachings of Tadao et al. that the number of pixels in each cell are the same so as to determine the size of the message to be encoded. Furthermore, each cell dimension represents a bit logical value (square/rectangular) and has a certain number of pixels, which contain the visual image and encoded messages.

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Moreover, such modification would have been an obvious extension as taught by Tadao et al., therefore an expedient.

Allowable Subject Matter

10. Claims 11-20 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

The best prior art of record, taken alone or in combination with other references, fails to teach method of selecting information-encoding graphical templates corresponding to the measurement blocks with the highest estimated probability from a predefined template set as set forth in the claims. These limitations in conjunction with other limitations in the claims were not shown by the prior art of record

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yang et al. (U.S. 6,000,614) discloses two-dimensional code reading apparatus.

Tadao et al. (EP 672,994) teaches method and apparatus for reading an optically two-dimension code.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (703) 305-5437. The examiner can normally be reached on 7:30 AM - 4:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

el
Edwyn Labaze
Patent Examiner
Art Unit 2876
May 28, 2003



KARL D. FRECH
PRIMARY EXAMINER